

ABSTRACT OF THE DISCLOSURE

There is provided an image processing apparatus for describing a real image as a virtual object using space data formed based on a photo image of the real object, and generating a virtual image of the virtual object using the space data. The image processing apparatus captures the photo image of the real object from a real camera viewpoint position while illuminating the real object by an illumination light source placed at a real illumination position. The captured photo image is converted into space data in the form of an object for each pixel, and the space data is stored in a memory together with various illumination conditions at the real illumination position to allow a search at a later time.